

REMARKS

Applicant appreciates the consideration of the response to the previous Office Action. The applicant has thoroughly studied the Office Action of January 7, 2009 and has submitted this amendment in response to that Office Action. Reconsideration of this application, as amended, is earnestly requested.

Claims 1, 15, and 34 are amended, and claim 2 previously has been cancelled without prejudice: Claims 1 and 3-34 remain pending in the application with claims 1 and 15 being the only independent claims.

Claims 1-25 and 27-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Armstrong (US 5,464,891) in view of Meriaz (US 2002/0113776), and claim 26 as being unpatentable over Armstrong in view of Meriaz and further in view of Yokoji (US 6,909,422). These rejections are respectfully traversed.

103 Rejections

To support a conclusion that the claim would have been obvious, "a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and that there would have been a reasonable expectation of success." *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360, 80 USPQ2d 1641, 1645 (Fed. Cir. 2006). The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). *See*, MPEP 2142.

In considering the prior art references, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385,

1396 (2007). In fact, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). See, MPEP 2143.01. When considering the references, the references must be considered in their entirety including the portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). See, MPEP 2141.02.

Armstrong teaches away from incorporating its trackball into a conventional mouse. See, e.g., col. 4: 15-19, “[u]nlike the prior art, such as typical mouse devices which require travel of the ball physically over a surface to activate sensors, and the surface area requirement might be great, the present invention requires no significant physical movement along a surface.” If Meriaz and Armstrong were to be combined, then Armstrong would be unsuitable for its intended purpose. Applicant contends that Armstrong must not be combined with Meriaz for a *prima facie* case for obviousness.

Claims 1 and 15

Applicant amends independent claims 1 and 15 to recite the limitation “the signal circuitry being configured to multiplex the outgoing displacement signal and with the second outgoing signal to form an outgoing multiplex signal.” No new matter is added, and the amendments find support in the specification as originally filed at paragraphs [0067-0072] and FIGS. 1e – 1i.

In the Office Action of January 7, 2009 referring to dependent claim 34, the Examiner indicated that Meriaz, paragraph [0007] teaches a multiplexer configured to multiplex the outgoing displacement signal and the second outgoing signal to form an outgoing multiplex signal. Applicant respectfully disagrees.

Meriaz teaches that a cable is connected to a computer input port for transmitting electrical signals responsive to the movements of the trackball that is manipulable by fingers and bottom ball manipulable by movement of the trackball housing. See, Meriaz, paragraph [0007]. A cable comprises a plurality of electrical conductors for conducting electrical signals. Signals responsive to the movements of the trackball and the bottom ball may be transmitted separately on individual conductors. Meriaz does not teach that the signals responsive to the movements of the trackball and the bottom ball are combined and transmitted on common conductors (multiplexed) as required by claims 1 and 15. Because Meriaz does not teach “multiplex[ing] the outgoing displacement signal and with the second outgoing signal to form an outgoing multiplex signal,” claims 1 and 15 are not obvious over the combination of Meriaz and Armstrong even if Armstrong is a proper 103 reference, which applicant contends it is not. The secondary reference, Yokoji, fails to cure this deficiency.

Claim 25

Dependent claim 25 recites that the “rotation sensor detects at least one polarization component.” Polarization refers to the property of waves that describes the orientation of their oscillations. For example, in many electromagnetic waves, transverse waves describe the orientation of the oscillations in the plane perpendicular to the wave's direction of travel. See, <http://en.wikipedia.org/wiki/Polarization>, accessed April 7, 2009. The Examiner's rationale for rejecting this claim, that “magnets are inherently polarized or else it wouldn't be a magnet, therefore magnetic sensors must detect some form of a polarization component,” does not address detecting a polarization component. See, OA, p. 9. A magnetic sensor may detect the presence of a magnetic field, but does not detect the orientation of components of the magnetic field. For at least this reason, Armstrong and Meriaz, alone or in combination, do not teach a “rotation sensor detect[ing] at least one polarization component,” and claim 25 is patentable over these references.

As set forth in MPEP 2143, to show a *prima facie* case for obviousness, all the prior art references, either individually or combined, must teach all the claim limitations. None of Armstrong and Meriaz teaches “the signal circuitry being configured to multiplex the outgoing displacement signal and with the second outgoing signal to form an outgoing multiplex signal.” Also, as argued *supra*, there is no motivation to combine Armstrong and Meriaz as required by the *prima facie* case for obviousness. Applicant submits that a *prima facie* case for obviousness has not been shown and that claims 1 and 15 are patentable over the cited prior art. Additionally, claims 3-14 and 16-34 are patentable at least by virtue of dependence upon a patentable independent claim.

CONCLUSION

In view of the above amendments and remarks, applicant respectfully requests reconsideration and withdrawal of the rejections, and an early indication of the allowance of the claims. Applicant believes the claims are in condition for allowance and respectfully solicit favorable action.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If any points remain at issue that the Examiner feels may be best resolved through a telephone interview, the Examiner is kindly invited to contact the undersigned by telephone at (909) 621-2059 or by email at cwschmoyer@yahoo.com.

Respectfully submitted,

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